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Smart Growth at Work: Project Highlights from EPA's Ten Regions

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Front cover: The "Envision Utah" initiative engaged citizens in a democratic process of considering pro's and con's of various future growth scenarios. Ultimately, Utahns chose "Scenario C" (enlarged). Top left scenario shows what continued dispersed growth would look like. Bottom right goes a step further than Scenario C, focusing nearly half of all new growth in existing urban areas.
(See writeup on page 18.)

INTRODUCTION

In communities across the nation, there is a growing movement to improve development patterns and practices. Concerned by recurring problems such as loss of open space, neglected infrastructure, growing commutes, and disinvestment in existing communities, many are turning to smart growth for new solutions. Spurring the smart growth movement are demographic shifts, a strong environmental ethic, increased fiscal concerns, and more nuanced views of growth. The result is a new demand and a new opportunity for development that serves the economy, community, and environment – for smart growth.

Smart growth recognizes connections between development and quality of life. It leverages new growth to improve communities. In general, smart growth invests time, attention, and resources in restoring vitality to center cities and older suburbs. Compared to prevailing development patterns since World War II, smart growth is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses. It also preserves open space and other environmental amenities. But there is no "one-size-fits-all" solution. The features that distinguish smart growth in a community vary from place to place.

Smart Growth Principles

1. Mix land uses.
2. Take advantage of compact building design.
3. Create housing opportunities and choices for a range of household types, family sizes, and incomes.
4. Create walkable neighborhoods.
5. Foster distinctive, attractive communities with a strong sense of place.
6. Preserve open space, farmland, natural beauty, historic buildings, and critical environmental areas.
7. Reinvest in and strengthen existing communities and achieve more balanced regional development.
8. Provide a variety of transportation choices.
9. Make development decisions predictable, fair and cost-effective.
10. Encourage citizen and stakeholder participation in development decisions.

Source: Smart Growth Network (see http://www.smartgrowth.org).

Successful communities do tend to have one thing in common: a vision of where they want to go based on those things they most value in their community, and plans for development which reflect these values. Their plans also tend to reflect certain general principles of smart growth (see box).

EPA supports smart growth principles because they are consistent with our mission of protecting public health and the environment. Clearly, EPA has an interest in seeing communities succeed in

their smart growth efforts. In fact, their success could be considered imperative for continued environmental progress in this country. The past 30 years have been remarkably successful for the Agency. Focusing on large point sources of pollution, we have made tremendous strides towards cleaning up the nation's air, water, and land. Now, non-point sources of pollution – such as urban runoff, and automobile emissions – increasingly threaten environmental quality.

Community development decisions will be key to meeting the emerging environmental challenges of the 21st century. More walkable, transit-oriented communities can help curtail future auto emissions. Source water protection through community planning can protect drinking water from pollution. Policies promoting infill development in blighted areas can provide capital for clean-up and re-use of brownfield sites.

EPA's role in these actions and decisions is significantly different from our more traditional regulatory role in environmental protection. Rather than regulator, EPA is a partner to communities as they pursue smart growth. Specifically, the EPA's partnership role has four components:

- Supplying information and outreach;
- Conducting research and policy development;
- Improving capacity and tools; and
- Providing flexibility and integrating smart growth into EPA programs.

EPA's various program and regional offices have ongoing activities in each of these areas. Since regional managers and staff carry out so many of the Agency's programs, they are uniquely positioned to integrate smart growth into the Agency's more traditional operations.

Many regional program offices are doing just that. The purpose of this document is to highlight smart growth innovations already taking place in EPA's 10 regions, focusing on examples of program implementation with "a smart growth twist." By doing so, we hope to encourage replication of successful projects and spur further creative integration of smart growth with program operations.

For quick reference, the document is arranged by broad program areas – air, water, brownfield efforts, and National Environmental Policy Act (NEPA) requirements. Discretionary activities are discussed as well. The document is organized this way to emphasize the point that all of these program areas and discretionary activities have potential to incorporate smart growth into their everyday work.

AIR

Clean air is one of EPA's top national goals for protecting public health and the environment. Toward that goal, tighter tailpipe emission standards have significantly decreased emissions of volatile organic chemicals (VOCs), and nitrogen oxides (NOx), which combine to form smog. Nationwide, between 1970 and 1997, VOC emissions from transportation sources have dropped 56% and NOx emissions dropped 5%. That is good news. However, while per-mile emissions have fallen, total travel has been rising rapidly, challenging our ability to meet future air quality goals. Auto emissions still account for 27.2% of VOCs and 29.8% of NOx, according to EPA's 1997 trends report.

To further reduce emissions, EPA is in the process of issuing new (Tier 2) tailpipe regulations. Under the new, tighter Tier 2 emissions standards, EPA expects that by 2030, VOCs will decrease by 28% and NOx will decrease by 76% (source: EPA's Tier 2/Sulfur Regulatory Impact Analysis - December 1999). However, in fast growing cities, with increasing vehicle miles traveled (VMT), additional reductions in NOx and VOC will be needed to meet national air quality goals.

Several cities in the United States are currently in "nonattainment" status because they do not meet EPA's air quality standards. To help these cities clean their air, EPA's regional air program offices have found innovative ways to support local efforts to increase transportation choices and reduce trip distances. The anticipated result is fewer smog-forming emissions and cleaner air.

Region 4

Atlantic Steel Project - Atlanta, Georgia

Strategy: *Designate the Atlantic Steel development, – a brownfield which will be redeveloped into a mixed use, pedestrian friendly, transit-oriented development – a Transportation Control Measure (TCM) allowing the development to proceed and reducing growth in auto travel.*

The Atlantic Steel Project promotes smart growth and urban livability by allowing the redevelopment of a former steel mill in midtown Atlanta. The 138-acre site is now slated to become a pedestrian-friendly commercial and residential development that will provide 2,400+ new residences and nearly 20,000 new jobs. The location and design elements of the site and its connection to an existing transit system work together to combat the auto-oriented nature of growth in the Atlanta area.

Because Atlanta was out of compliance with federal transportation conformity requirements under the Clean Air Act, the metropolitan area was not allowed to use federal funds to add to its highway system or construct transportation projects that require federal approval. This prohibition extended to a proposed bridge connecting the development to existing roads and highways, and to existing mass transit. EPA Region 4 used the flexibility of Project XL to approve the project as a Transportation Control Measure (TCM) under the Clean Air Act. Without designation as a TCM, Atlanta's nonconformity status would have prevented the construction of the bridge. In return, the Atlantic Steel project is expected to lead to reduced future emissions growth through the use of mass transit, shorter trips for residents and workers, access to services within walking or biking distance, revitalization of an urban community, and productive reuse of land that was previously considered a liability.
(See http://www.epa.gov/projectxl/)

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Region 5

Metropolitan Chicago Regional Air Quality & Economic Development Strategy XL Project

Strategy: *Use Clean Air Act to create incentives for economic development within existing urbanized area.*

Under the Clean Air Act, a new or modified major source of emissions (such as a factory) which locates in a non-attainment area must purchase offsetting emissions reductions. Offsetting emissions are created by another business that reduces its emissions. Currently, in the Chicago non-attainment area, a business which is a new or modified major source of emissions must purchase 1.3 tons of offsets for each 1 ton of emissions it will generate.

Under this project, the City of Chicago will create a "bank" of emission reductions through a variety of activities. The emissions reductions will be quantified under a structure approved by the U.S. EPA and Illinois EPA. Chicago will permanently retire 40% of the emissions reductions. The remaining 60% will be available for businesses which locate in specified development zones. Businesses which locate in these zones will use emissions reductions from the bank in lieu of purchasing emission offsets.

EPA's role in this project is to designate the zones which businesses must locate in to be eligible for use of the bank. Section 173(a)(1)(B) of the Clean Air Act allows the

EPA Administrator to *"...identify a zone to which economic development should be targeted."* The project will designate zones in: 1) low income areas; 2) brownfields; and 3) areas near public transportation. This will create an incentive for businesses to redevelop brownfields within the existing urbanized area or to locate in neighborhoods which need economic development or are near public transportation. (See http://www.epa.gov/projectxl/chicago/index.htm)

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Region 6

Smog Control in Texas and Oklahoma

Strategy: *Work pro-actively with cities – promote transportation summits, transit/air quality studies – to improve air quality through better planning and transportation alternatives.*

In 1999, EPA Region 6 hosted transportation summits challenging community planners to consider the relationship between transportation projects and air quality. Region 6 selected San Antonio, Texas, for a transit study because the city is close to reaching non-attainment levels for smog. Further, Region 6 is helping cities like Austin, San Antonio, Corpus Christi, and Tulsa develop a pro-active approach to address air quality so that they can meet air quality standards. As part of its strategy to address air quality problems, the region is working with the U.S. Department of Transportation and states to identify opportunities for light rail systems, transportation corridors, alterative fuel buses, and High Occupancy Vehicle lanes.

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WATER

As point sources of water pollution have been controlled, diffuse non-point sources become increasingly problematic. Urban runoff is the leading source of damage to estuaries and the third largest contributor of pollution to our country's lakes. Smart growth practices can boost watershed management efforts. By preserving green spaces, reducing impervious surfaces, and preserving critical environmental areas, we can reduce urban runoff and more effectively buffer water bodies and other resources. EPA's water programs can and do affect development patterns. As such, they provide a unique opportunity to support local smart growth efforts while protecting water resources.

Region I

Clean Water State Revolving Fund for Sewer Infrastructure - Maine

Strategy: *Use Clean Water State Revolving Fund to support and create incentives for comprehensive planning and maintenance of existing water infrastructure.*

Since 1995, Maine has used its Clean Water State Revolving Fund (CWSRF) to make loan funds available to single-family home owners for the repair and upgrade of septic systems. Under this program, the Maine Municipal Bond Bank (MMBB) lends money to the Maine State Housing Authority (MSHA). The MSHA then makes 1% loans to homeowners that carry maximum repayment terms of 20 years. All repayments received by the MSHA are remitted to the MMBB and returned to the CWSRF. The state has provided $1.5 million of $2 million committed to the program.

The Maine CWSRF is now considering a proposed "patient loan" program – so called because the lenient payback schedule implies patience on the part of the lender. The proposed program would assist Maine cities and towns that wish to encourage development in designated residential growth areas by offering low-interest loans for financing sewer extensions to serve those areas. Extending sewer services to undeveloped growth areas designated in local comprehensive plans would serve as a significant incentive to attract development to those areas. These designated growth areas will be relatively high density (3 residences per acre) for Maine. Patient loans would offer a graduated or "patient" payback provision that keeps payments low at the start of the project. The state anticipates making $3 million available for

the program.

For more information about the activities of the Maine State Revolving Fund, see http://janus.state.me.us/dep/blwq/docgrant/srfparag.htm.

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Region I

Jordan Cove Urban Watershed National Project - Waterford, Connecticut

Strategy: *Use grant funding under section 319 of the Clean Water Act to support a pilot project to evaluate water quality impacts of traditional growth versus smart growth.*

In this water quality monitoring project, Section 319 of the Clean Water Act is used to promote cleaner water and economic development in Waterford, Connecticut. The project will compare the quantity and quality of runoff from traditional versus more environmentally sensitive development. The monitoring will be conducted on an innovative, planned community in the Jordan Cove watershed in Waterford. This project is funded in part by the Connecticut Department of Environmental Protection (CTDEP) through EPA's Section 319 National Monitoring Program.

The 18-acre site is divided into two neighborhoods: one with building lots arranged in a traditional half-acre zoning pattern; the other with cluster housing using a number of best management practices (BMPs) for runoff control. Stormwater from the traditional section is collected by curbs and catch basins, then piped through a sediment removal system before entering a brook. The BMP-oriented neighborhood will feature grass swales; a vegetated filtration basin; roof leader "rain gardens"; pervious driveways, low-mow, no-mow and conservation zones; and a pervious road with a central bio-retention garden.

CTDEP is working with the community on adopting pollution prevention techniques. The BMP-oriented neighborhood is expected to generate less stormwater runoff and pollution. Monitoring conducted before, during, and after construction will document actual results. Post-construction monitoring will start in 2000 and continue for 3 to 5 years.

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Region 2

New York City Watershed Agreement

Strategy: *Meet Clean Water Act goals by encouraging innovation and comprehensive planning that protects drinking water supplies.*

Working with EPA and other partners, New York City has developed a comprehensive long-range watershed protection program that uses a multifaceted strategy to protect and improve an upstate water supply system that serves 9 million residents every day. The program began in 1989 and has evolved since then. Its success so far has enabled New York City to receive a long-term EPA waiver from the federal requirement that it filter water from its Catskill/Delaware supply.

A cornerstone of the program is the New York City Watershed Memorandum of Agreement (MOA) signed in January 1997 by several key parties: the City of New York, the State of New York, the U.S. EPA, the Coalition of Watershed Towns (an organization representing 34 towns, nine villages and five counties located west of the Hudson River), watershed communities, and non-profit environmental organizations including the Catskill Center for Conservation and Development, the Hudson Riverkeeper, the Trust for Public Land, the Open Space Institute, and the New York Public Interest Research Group (NYPIRG). The result of extensive negotiations, the MOA is a legally binding document that specifies the parties' obligations for protecting the watershed. It has three main components: environmentally sensitive land acquisition and stewardship; watershed rules and regulations; and watershed protection and partnership programs. A not-for-profit corporation, the Catskill Watershed Corporation, was established to develop and implement several city-funded programs (see http://cwconline.org/).

To facilitate land acquisition, the State Department of Environmental Conservation (DEC) issued a 10-year permit (with a 5-year renewal option) to enable the city to acquire control of undeveloped land near reservoirs, wetlands, and watercourses through outright purchase or through conservation easements.

Parties to the MOA agreed to withdraw litigation against the city challenging proposed regulations or other aspects of the watershed protection programs. All parties also agreed to forgo future challenges contesting steps taken to implement the agreement. The MOA specifically defines a process by which new negotiated watershed regulations are to be submitted for public review and adopted.

Since the MOA was signed, the City has purchased over 25,000 acres of watershed land, approximately 1,000 septic systems have been remediated or replaced, and the Watershed Rules and Regulations are being implemented. In addition, nine upstate sewage treatment plants owned and operated by New York City were upgraded ($240 million), city-owned dams and water supplies in the watershed were rehabilitated ($240 million), and a watershed agricultural program was implemented ($35 million).

This watershed agricultural program was the first upstate/downstate collaborative effort to link water quality protection with an economic goal.

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Region 4

Tampa Bay Nitrogen Management Consortium

Strategy: *Facilitate an innovative partnership that addresses impacts of growth on nitrogen management, overall water quality, and the long-term recovery of seagrasses.*

The Tampa Bay Nitrogen Management Consortium is an innovative alliance of government agencies and key industries concerned about ecosystem health in Tampa Bay. EPA Region 4 played an important role in helping to create the Consortium. Consortium members have developed and agreed to a Nitrogen Management Plan that will ensure that the combined amounts of nitrogen entering the bay from stormwater runoff, wastewater discharge, smokestack emissions, and other sources does not increase in the future – even with anticipated growth in the region.

As part of the plan, government and industry partners in the Consortium have made specific nitrogen management commitments that collectively will reduce nitrogen loading to the bay by 140 tons per year by the year 2000. Research shows that this reduction should be sufficient to allow the gradual recovery of more than 12,000 acres of underwater seagrasses, which serve as a natural life support system for the bay.

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Region 5

Clean Water State Revolving Funds and the City of Broadview Heights - Ohio

Strategy: *Use CWSRF loans as an incentive for smarter growth and conservation of sensitive lands.*

Ohio has used CWSRF loans to support smart growth in several ways. In one example, the state CWSRF program negotiated adoption of growth control ordinances as a condition of approving funding.

In another example, the Ohio CWSRF program negotiated adoption of a smart growth ordinance with the city of Broadview Heights. The city applied for a CWSRF loan to finance construction of an interceptor sewer and plant upgrades in order to eliminate a local package treatment plant. CWSRF staff discovered that sensitive riparian stream corridors might be opened to

development as a result of these improvements. To protect these resources, the CWSRF convinced the city of Broadview Heights to pass an ordinance that would not allow new developments that eliminated riparian stream corridors to connect to the interceptor. The CWSRF loan terms were attractive enough to encourage the city to pass the ordinance, rather than seek funding elsewhere.

The Ohio CWSRF has a program feature in its Intended Use Plan to provide loans to wastewater treatment entities. The loans contain additional principal and lower interest rates. The additional principal is used to finance projects which restore and/or protect aquatic resources. The reduced interest rate is an incentive to municipalities either to implement such projects, or to sponsor the implementation of such projects by other responsible entities such as land trusts and conservancies.

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Region 9

Consumnes River Watershed - California

Strategy: *Use CWSRF loans for land preservation projects which protect water resources and conserve open space.*

EPA funded an $8 million loan from the California State Water Resources Control Board to The Nature Conservancy (TNC) to purchase the Howard Ranch in Sacramento County. The purchase expanded TNC's Consumnes River Preserve to 37,000 acres. The Conservancy's Howard Ranch purchase is the largest land acquisition ever funded under the Clean Water Act's State Revolving Loan Fund. (For more information on Howard Ranch, see TNC's dedicated Web site at http://www.howardranch.org/index_s1.htm).

The purchase counters two threats to the property and water resources. The first was its possible conversion to vineyards, which require deep-ripping of soils and fertilizer and pesticide applications and often bring groundwater overdrafts and surface water diversions. The second threat was the conversion of this open space to urban uses, which would result in greatly increased polluted runoff. The Preserve will protect critical habitats, open spaces, and water quality in one of the state's most rapidly growing areas, the Central Valley.

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BROWNFIELD PROPERTIES

Infill development, compact design, and investment in existing communities are hallmarks of smart growth. As a result, brownfields cleanup and redevelopment are smart growth activities almost by definition. The following brownfield revitalization projects in Regions 1, 3, 7, and 8 are especially good examples of how brownfield work can contribute to smart growth. In each example, former brownfield sites are cleaned up with specific purposes in mind – purposes that serve the transportation, economic, community, and environmental goals of the surrounding community.

Region 1

From Brownfield to Ballpark - Bridgeport, Connecticut

Strategy: *Use an EPA brownfield grant to support a community's effort to create a GIS site inventory, then work with the community to assess and clean up high-priority sites for uses that boost the economy and quality of life.*

In 1994, EPA awarded a $200,000 grant to Bridgeport, Connecticut, to create a Geographic Information Sytem (GIS) inventory of 205 brownfield sites. Based on the GIS inventory, the city identified six high-priority sites for further study. Two of the sites, Jenkins Valve and Sprague Meter, were assessed under EPA's brownfields program. These sites were then cleaned up and turned into a minor league ballpark, which opened May 1998. The city was able to fund the land acquisition, remediation, and construction through municipal bonds and private investment.

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Region 3

Recycling Land and Buildings - Bethlehem, Pennsylvania

Strategy: *Streamline the processes associated with EPA's involvement in brownfield projects so that adaptive reuse and revitalization can proceed as quickly as possible.*

The old Bethlehem Steel plant in Bethlehem, Pennsylvania, is on its way to becoming a model for adaptive reuse of a former industrial site. The site is being transformed into a $450 million multi-use facility that may become the largest brownfield redevelopment project in the country. The redevelopment is moving forward as a result of a cooperative effort among Bethlehem Steel, various state

agencies, and EPA. EPA Region 3 approved a voluntary investigation and cleanup plan for this RCRA corrective action site – avoiding the traditional need for two consent orders and saving time and resources. Region 3 also streamlined cleanup by having EPA personnel in the field working with Bethlehem and their consultants to approve on-site actions. This expedited cleanup plan replaced the normally lengthy review and comment process with monthly stakeholder team meetings. All of these actions resulted in a less costly, more efficient brownfield remediation that is good for the environment and the community.

When redevelopment is completed, the property will retain the historic industrial character of the former steel plant. It will house the National Museum of Industrial History (an affiliate of the Smithsonian Institution), a hotel conference center, restaurants, stores, a movie theater complex, an incubator for high-tech startup companies, and a National Hockey League-affiliated hockey rink. An adjacent 1,600 acres of land are being developed as a commerce center with distribution, transportation, manufacturing, and commercial facilities.

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Region 7

Kansas City Brownfield Showcase Community

Strategy: *Work with brownfield showcase community to develop innovative public/private and local/state/federal partnerships and leverage resources to clean up and redevelop brownfields in the metropolitan area.*

Kansas City, Missouri, and Kansas City, Kansas, were jointly designated as one of 16 Brownfield Showcase Communities in September 1998. As a Showcase Community, Kansas City has been able to expand on its earlier Brownfield Assessment Pilot activities. The city began establishing greater partnerships with other federal agencies, the states, community members, and key stakeholders to address the many brownfield issues in the metropolitan area. So far, the project has leveraged over $9.7 million dollars in federal and state funds. Partners include several federal agencies, the states of Missouri and Kansas, and local community members committed to revitalizing urban neighborhoods through reuse of brownfield properties. EPA's role is primarily to provide special technical, financial, and other assistance to the Showcase Community.

In addition to ongoing assessment and redevelopment activities on individual brownfield properties, work has begun on an area-wide assessment of the entire Blue River Valley. The intent is to facilitate cleanup and reuse of business properties across the area. Using EPA provided pilot funding, the Showcase Community is offering technical

support and leadership in the development of the River front Heritage trail, a bi-state bike/trail network that links the two Kansas City metropolitan areas together and passes near many brownfield sites. Also, it is actively working to increase outreach and community involvement in the planning and reuse of brownfield sites. Kansas City is a national model demonstrating the benefits of a focused, coordinated effort to address brownfields.

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Region 8

Salt Lake City's Gateway District

Strategy: *Find ways to link brownfield redevelopment projects and transportation improvement; establish models for doing so.*

Salt Lake City's Gateway District, another Brownfield Showcase Community, is a former industrial center impacted by abandoned sites and changing transportation networks. Efforts are underway to clean up and revitalize the Gateway District with mixed-use development as well as support facilities for the 2002 Winter Olympics.

EPA has supported Salt Lake City's efforts to revitalize the Gateway District and generally address brownfield situations more effectively. EPA has provided environmental funding, in-kind services, and technical assistance, and has helped the city implement its plan for the Gateway District more effectively.

The Gateway district has many transportation features: numerous railroad tracks, two railroad depots, and several Interstate 80 off-ramps that bypass the district. Salt Lake City has successfully negotiated with the railroad company to eliminate miles of unused track, making the district safer and more inviting. The city negotiated for three I-80 off-ramps to be shortened so that the Gateway district will be accessible from the highway. An intermodal transportation hub is planned for the middle of the district. The hub is intended to house light rail, commuter rail, train station, and a bus terminal.

When Salt Lake City hosts the 2002 Winter Olympics, the Gateway District and the rest of Salt Lake City will receive worldwide media exposure. The media are expected to be housed in the Gateway District, and certain ice skating events will be held there. Salt Lake City's revitalization efforts for the district include a $250,000,000 to $375,000,000 privately funded mixed use development that is currently under construction adjacent to one of the district train depots. This smart-growth development will include retail shops, community arts and entertainment facilities, combined with mixed income housing for bringing people close to where they work and shop. For more information on the project, see:
(http://www.epa.gov/region08/land_waste/bfhome/bfpilots/bfslcga/bfslcga.html)

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NEPA

The National Environmental Policy Act (NEPA) requires federal agencies to determine the environmental impacts of federal actions. NEPA analyses include direct, indirect, and cumulative impacts to air, water, and land. NEPA also requires consideration of alternative project designs, and/or alternative actions, as may be needed to reduce impacts. As local and state concerns about growth have risen, EPA regions have been asked to do more comprehensive analysis of indirect and cumulative impacts. As a result of more analysis and better understanding of impacts, some projects are considering new alternatives, while others have adopted strategies to mitigate unintended growth consequences.

Region 5

US-12 Highway Expansion - Wisconsin

Strategy: *Consider secondary impacts such as unplanned development in NEPA review; take measures to prevent indirect impacts.*

Secondary impact mitigation may become more common for federally funded or regionally significant development projects that are subject to NEPA review. For example, upgrades to the US-12 corridor from Middleton through Sauk City in Wisconsin have been controversial for several years. Although the upgrades would pose a generally moderate level of direct impacts, opponents to widening the highway from two to four lanes have argued indirect impacts of the upgrade would encourage urban sprawl, consume farmland, and threaten the Baraboo Hills, a National Natural Landmark.

According to the Council on Environmental Quality, growth-inducing effects (sprawl, farmland conversion, or loss of open space) from development projects are considered to be indirect impacts. In the case of the US-12 corridor expansion, public concern over the increased development as a result of highway expansion was high. Ultimately, the US-12 expansion project was approved. However, several key stakeholders (FHWA, the U.S. Department of the Interior, State of Wisconsin) agreed to use Purchase of Development Rights (PDRs) and related strategies to protect nearby sensitive lands.

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DISCRETIONARY ACTIVITIES

EPA plays four major roles in smart growth:

1) Technical assistance and capacity building;
2) Research;
3) Outreach and supplying information;
4) Integration of smart growth into EPA programs.

So far this report has concentrated on the fourth category, integrating smart growth into EPA's statutory programs. However, EPA regions have also done a great deal of work in the areas of information sharing, research, and capacity building. Regions that have comprehensive smart growth initiatives have invariably combined aspects of all these approaches (see EPA Region 1 Livable Communities Action Plan). Regions have sponsored conferences, given grants, provided technical assistance supporting smart growth in too many projects to list here. The projects highlighted below were selected with the intent of suggesting the wide range of regional projects that promote smart growth through discretionary activities.

Capacity Building and Technical Assistance

Region 1

Vermont Forum on Sprawl

Project to Support Best Development Practices.

The primary objective of this project is to help towns in Vermont understand how they can expedite local regulatory review for development projects that adhere to smart growth principles. The secondary objective is for the project to serve as an educational tool for officials, citizens, and planners around the state. EPA Region 1 funded this project through their Regional Livable Communities Grant Program.

This project will result in development that protects environmental quality and more closely reflects the kind of communities Vermonters say they want. These practices will be incorporated into a handbook that can be used by municipal officials to evaluate development proposals. It also can be used by developers looking to build projects that incorporate smart growth principles, such as

compact pedestrian and transit-oriented development, infill projects, protection of open space and agricultural land, development located near available water and sewer services, accessible public outdoor space, rehabilitation of historic structures, and development near employment centers.

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Region 6

New Development Controls - Flower Mound, Texas

Encourage and recognize better town planning, and provide technical assistance.

During the 1990s, the North Texas town of Flower Mound (population 50,000) experienced a 206% growth rate. This jump in population prompted town leaders to adopt a smart growth plan that includes an update of the master plan, a temporary moratorium on new residential development,
and amendments to the building code to prevent stockpiling of anticipated building permits. Changes included:

- Zoning Thresholds to limit the effects of proposed new development on existing infrastructure, open space and habitat;

Region 1 Livable Communities Action Plan: Four Key Elements

1. *Strengthening Local Capacity*
   - Developing Training Programs and holding "Regional Growth Forums"
   - Coordinating mechanisms for financial assistance for local organizations
2. *Reshaping EPA Policies and Programs*
   - Brownfields and Urban Environmental Initiative
   - NEPA and Clean Water Act Section 404
   - Voluntary SIP credits for land stewardship and transportation demand management
   - Gaining an early seat at the table in the MPO transportation Planning Process
3. *Building Effective Partnerships*
   - New England Smart Growth Partnership
   - Federal Smart Growth Agreement
   - Private Sector Outreach
4. *Elevating Public Awareness*
   - Editorial Board Meetings with Major Media Organizations

- A new commission to conduct annual reviews of the municipal plan's overall effectiveness and determine whether the plan is achieving its objectives.

The town recently received a special recognition award from the EPA Region 6 Water Quality Division for its contribution to livability and environmental quality. Region 6 will provide technical assistance to help implement portions of the plan pertaining to open space and habitat protection, and with regard to household wastewater treatment for residences in peripheral areas.

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Region 8

Envision Utah

Support public/private partnership to involve citizens in democratic process of selecting a preferred growth scenario and developing an implementation strategy.

In 1996, Utah's unprecedented growth spurred the emergence of a public/private partnership initiative called Envision Utah. This nonpartisan partnership consists of business leaders, state and local government officials, developers, conservationists, landowners, academicians, church groups, and other citizens. Its purpose is to guide citizens through a democratic process of imagining possible growth scenarios, choosing a growth scenario they prefer, and

developing a strategy for growth management and land use policies based on a shared vision, or "Preferred Growth Scenario." In the process, the partnership has conducted public meetings and surveys to generate data on demographic, economic, and environmental conditions in the Wasatch Front, where nearly 80 percent of Utah's population resides.

The Envision Utah process has good potential to be adopted or adapted by other localities in that it builds on a broad-based, grass roots alliance. For this reason, EPA has awarded grants to support both the visioning and the strategy and implementation phases of the project. The Agency has also participated in Envision Utah workshops that target macro level issues like "where to grow" or "how to grow" as well as micro level issues like community options for local residents. For more information on this project, see http://www.envisionutah.org

Contact: Dean Gillam, EPA Region 8, Denver, CO
Tel: 303 312-6432

Region 9

Southern Nevada Regional Planning Coalition

Use grant funding to support enhanced planning tools to analyze growth impacts.

Under this grant, staff at the Clark County Dept. of Comprehensive Planning (under the direction of the Southern Nevada Regional Planning Coalition) will coordinate their regional planning tools (TransCad and the STEP analysis model) to better analyze

medium-scale and parcel level changes in land use and their effects on transportation and air quality. They will also examine potential urban infill projects for Las Vegas and develop a regional trails master plan. Parallel to this project, the same staff will be using EPA's Smart Growth INDEX model to look at the impacts of various development scenarios in Las Vegas.

Contact: Nova Blazej, EPA Region 9,
San Francisco, CA
Tel: 415 744-2089.

Outreach and Information

Region 1

Home Town Maine

Support State Planning Office Education Campaign to Stem Sprawl and Restore Neighborhoods.

This project, supported by the Region 1 Livable Communities Grant Program, is an educational program to encourage development that better protects the quality and health of the state's cities and towns. The project is an out-growth of a survey last summer by the Maine State Planning Office, showing a pent-up demand in Maine for alternatives to traditional subdivisions. The survey of 600 recent homebuyers showed there is a significant market for what is being called "The Great American Neighborhood" – quiet, tree-shaded villages with such features as narrow streets, small lots, shallow setbacks, and stores within walking distance. These design features, as compared to traditional development feature, also lead to improved air and water quality. The State Planning Office will develop an educational program to encourage developers and municipalities to take advantage of this demand.

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Boston, MA
Tel: 617 918-1087

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Region 2

Puerto Rico's Road to Smart Growth

Support local effort to gather land-use information for decision makers and communities.

With a grant from EPA, this project will gather and transfer information to educate communities, government, and other constituencies about land use patterns in Puerto Rico, using the San Juan metropolitan area as an example. It will address land use patterns which have resulted in serious water, air, and land pollution problems, and a deteriorating quality of life for many communities.

Project activities include production and distribution of an educational publication, *Puerto Rico's Road to Smart Growth: A Primer*, research and development of smart growth alternatives, and a Smart Growth Congress in San Juan for key decision makers and metro area communities. The project is expected to: 1) change key decision makers'

vision of growth and progress by making them aware of smart growth alternatives and their economic, environmental and social benefits; 2) provide communities with information and tools to promote sustainable development through smart land use planning and conservation; 3) build partnerships between decision makers and communities to help ensure long-term environmental protection through the application of smart growth approaches.

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Region 7

Successful Communities by Design

Partnership with U.S. Department of Transportation to provide funding support for community design outreach tool.

Successful Communities by Design is supported by funds from the Transportation and Community and System Preservation Pilot program and EPA's Sustainable Development Challenge Grant program. The project addresses smart growth and livability issues with a variety of approaches, including public forums and builders' alliances, and is facilitated by the Mid-America Regional Council. A CD-ROM and Web site highlighting 20 principles for smart growth is available at http://www.qualityplaces.marc.org. In the fall of 2000, a prototype site for Transit Oriented Development will be selected as part of the program.

Contact: Christopher Hess, EPA Region 7, Kansas City, KS
Tel: 913 551-7213

Research

Region 3

Testing Vegetation Growth on Nine-Mile Run Brownfield Site - Pittsburgh, Pennsylvania

Provide grant support for creation of urban parks and green spaces.

In the central city of Pittsburgh, the largest brownfield is the Nine-Mile Run site, a former landfill for slag from steel-making days. City planners envision an extended public park and a new, compact urban development on this 238-acre site as part of a strategy for attracting middle-income residents – many of whom have moved to outer suburbs – back to the city.

What will grow on barren slag slopes so that they can be turned into a greenway envisioned as an extension of Pittsburgh's Frick Park out to the Monangahela River? An EPA Sustainable Development Challenge Grant is supporting field research (planting test plots, monitoring surface temperatures with and without mulch, etc.) to find new, low-cost techniques for "re-vegetating" the Nine Mile Run slag slopes. If Pittsburgh can

successfully transform the Nine-Mile Run brownfield site into a greenway, this extension of Frick Park will be a significant cornerstone in rebuilding livable neighborhoods in the central city.

Contact: Jeff Barnett, EPA Region 3, Philadelphia
Tel: 215 814-3246

PROSPECTIVE ON SMART GROWTH

Previous sections of this report have linked patterns of development to the environmental protection goals of EPA programs and described examples of projects in EPA regions which support smart growth approaches. As smart growth principles have become well known over the past several years, they have gained wide acceptance at the local, state, and national levels. Tools, incentives, and policies have been developed by governmental entities at all levels to facilitate the successful expansion of smarter approaches to growth and development. As the use of smart growth approaches expands, it will be important for EPA to continually assess its rules, processes, and policies for opportunities to support smart growth or to remove unintentional barriers to better patterns of development. This section briefly considers some emerging opportunities for EPA to take the environmental impacts of growth into account during development of future rules and policies.

The National Environmental Policy Act (NEPA), Secondary Impacts

The NEPA Compliance Division of EPA proposes to develop guidance to assist 309 (CAA) reviewers with assessing and commenting on NEPA documents submitted by other federal agencies for development projects. The guidance would address growth-related issues including secondary and induced growth impacts. Other effects addressed in the guidance would include changes in patterns of land use, population, density, or growth rate.

Considerations of secondary and induced growth impacts are often included in NEPA analyses. NEPA analysis provides an opportunity to inform decisions on development and to recommend implementation of mitigation measures. Because of the attention development issues are receiving at the local, state, and federal levels, guidance on assessing the environmental impacts of secondary and induced growth from projects subjected to NEPA review is important. It can serve as a tool to help ensure consistent NEPA evaluations.

The guidance has the potential to encourage full disclosure of secondary impacts of development decisions so that their effects can be properly assessed. In general, the guidance could outline or feature development alternatives that support better patterns of development. The guidance might also contain a brief inventory of tools or resources that suggest alternatives or mitigation actions to alleviate environmental

impacts of development decisions.

Contact: Jim Serfis, EPA Office of Federal Activities, Washington, DC
Tel: 202 564-7161

Total Maximum Daily Loading (TMDL) Initiatives

EPA's July 2000 TMDL regulations defining new minimum elements of a TMDL program explicitly require an allowance "for reasonably foreseeable increases in pollutant loads including future growth." This requirement creates an opportunity for the Agency to develop guidance for states on how future allowances for growth can be reduced if smart growth techniques are required in a watershed.

The 1992 TMDL regulations require that the state's TMDL list include a priority ranking for all water quality limited water body segments that require TMDLs. EPA could encourage states to prioritize waterways where infill development, brownfield redevelopment, and other smart growth activities are in place or could be easily put in place. Such an action would increase certainty for developers in these areas and hasten redevelopment of the areas surrounding the waterways, encouraging further infill development and brownfield redevelopment.

Combined Sewer Overflow (CSO) and Sanitary Sewer Overflow (SSO) Programs

Efforts to address CSO and SSO issues offer several opportunities to use smart growth to improve environmental protection. Supplemental environmental projects that result from a CSO/SSO settlement can be directed at improving riparian buffer areas, reducing storm water runoff, and revitalizing waterfront areas while increasing and improving urban green space. This can bring people and economic activity back to waterfront areas while protecting water quality and increasing interest in the SSO/CSO program.

EPA could encourage state revolving funds to prioritize funding of urban CSO/SSO projects, particularly in areas with an inadequate rate base. Doing so would help avoid steep rate hikes in established areas. Rate hikes in established areas can encourage sprawling development and increase on-lot sewage disposal. By prioritizing funding of urban CSO/SSO projects, the Agency would further encourage infill and brownfield redevelopment and relieve development pressure on open space outside metropolitan areas.

Storm Water Permit Program

Smart Growth can improve storm water management. In communities employing smart growth practices, it may be possible to reflect these storm water benefits by providing flexibility in implementation of storm water control requirements. Such

practices would include transferable development rights, compact development, and state and local ordinances that reduce road width, parking requirements, and other programs that reduce impervious surfaces and protect wetlands, watersheds and riparian areas. It might also be possible for EPA to include infill and brownfield redevelopment tied with open space protection as a best management practice to reduce storm water runoff.

Smart Growth and Building Deconstruction/Waste Disposal

There may be opportunities for EPA to encourage infill development and renovation of existing structures by making such activities easier from a waste management standpoint. One of the best ways to salvage and reuse building materials is through deconstruction. Deconstruction is the process of manually disassembling buildings to maximize the salvage of building materials. As an alternative to traditional demolition, deconstruction relies less on wrecking balls and bulldozers and more on the use of hand tools and manual labor to take buildings apart.

EPA's recent clarification regarding the management of lead-based paint (LBP) debris as a household waste by residential contractors is consistent with the Agency's solid waste hierarchy. Under the policy, contractors can manage residential LBP debris (such as architectural building components – doors, window frames, painted wood, etc.) as a household waste rather than a hazardous waste. Due to this policy, lead abatement activities as well as renovations are simplified and costs are reduced.

It is too early to tell how this policy will affect renovation of buildings or the reuse of components by contractors. However, it will lower the cost of many renovation and rehabilitation projects and therefore encourage infill redevelopment and reuse of existing structures.

Supplemental Environmental Projects (SEP) and Smart Growth

A SEP is an environmental project that a violator of EPA regulations voluntarily agrees to perform as part of the settlement of an enforcement action. Although the violator is not legally required to perform a SEP, the cash penalty to the violator may be lowered as a condition of performing an acceptable SEP. EPA has approved the use of SEPs to assess or cleanup brownfield properties. Such a use of SEPs is an effective way to enhance the environmental quality and economic vitality of areas in which the enforcement actions were necessary.

EPA has described seven categories of projects that can be acceptable SEPs. Categories that directly relate to smart growth are public health, pollution prevention, and environmental restoration and protection. An eighth category is "other types of projects." For the eighth category, acceptable SEPs are those that have environmental merit but do not fit within the original seven categories. Such projects

would need to be consistent with the provisions of the SEP Policy and approved by EPA.

SEPs could be used as an innovative tool for encouraging smart growth. Because SEPs are part of an enforcement settlement, they must meet certain legal requirements. Some relationship between the SEP and the violation must exist, the SEP must be voluntary, etc. Violators or even the public may not consider smart growth opportunities when contemplating the use of SEPs. Therefore, EPA might provide violators with examples of potential SEPs that target smart growth based on the federal environmental law that is violated.

Land Use Policies and Air Quality Improvement Credits

States and communities are interested in accounting for the air quality benefits of their development choices. EPA's Office of Transportation and Air Quality in OAR is developing guidance to encourage the development of land use policies and projects which improve livability in general, and air quality in particular. The guidance, "*Recognizing the Air Quality Benefits of Local and State Land Use Policies and Projects in the Air Quality Planning Process,*" is intended to complement the efforts of states and local areas, and to provide direction, flexibility, and technical assistance to areas that wish to implement and count these measures towards meeting air quality goals.

In the draft guidance, EPA states that accounting for air quality benefits, either in State Implementation Plans (SIPs) or through the conformity process, is appropriate for land use policies and projects where EPA has assurance that reduced emissions from transportation sources will result. The guidance presents the conditions under which the benefits of land use polices and projects could be included in a SIP or in a conformity determination, and provides guidelines for quantifying the emissions reductions and meeting EPA reporting criteria. When this guidance is finalized, it will present opportunities for EPA to recognize the air benefits of growth which encourages infill and brownfield redevelopment, mixes land uses, creates compact vibrant communities, and catalyzes community design that promotes transportation choice.

REGIONAL CONTACTS

Below is a list of primary regional contacts for smart growth initiatives. Specific projects may have additional or different contacts.

Region 1 - Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Contact: Rosemary Monahan, Tel. 617-918-1087. *monahan.rosemary@epa.gov.*

Region 2 - New Jersey, New York, Puerto Rico and the U.S. Virgin Islands. Contact: Rabi Kieber, Tel. 212-637-4448. *kieber.rabi@epa.gov.*

Region 3 - Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. Contact: Paul Wentworth, Tel. 215-814-2183. *wentworth.paul@epa.gov.*

Region 4 - Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. Contact: Mary Jo Bragan, Tel. 404-562-8323. *bragan.maryjo@epa.gov.*

Region 5 - Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Contact: James Vanderkloot, Tel. 312-353-3161. *vanderkloot.james@epa.gov.*

Region 6 - Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Contact: Adela Cardenas, Tel. 214-665-7210. *cardenas.adela@epa.gov.*

Region 7 - Iowa, Kansas, Missouri, and Nebraska. Contact: Richard Sumpter, Tel. 913-551-7661. *sumpter.richard@epa.gov.*

Region 8 - Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. Contact: Sara Summers, Tel. 303-312-6318. *summers.sara@epa.gov.*

Region 9 - Arizona, California, Hawaii, Nevada, and Pacific Islands and Tribal Nations subject to US law. Contact: Sara Russell, Tel. 415-744-1029. *russell.sara@epa.gov.*

Region 10 - Alaska, Idaho, Oregon, and Washington. Contacts: Kenneth Brooks, Tel. 503-326-3280. brooks.kenneth@epa.gov, and Wayne Elson, Tel. 206-553-1463. *elson.wayne@epa.gov.*